# CLAIMS

What is claimed is:

1-74. (Cancelled)

75. (Previously Presented) A system for performing electronic imaging procedures, comprising:

a diffusion filter configured to receive input light and responsively generate diffused output light wherein said diffusion filter is utilized to create said reference image with said input light formed from light samples that are collected, diffused and averaged to create a single uniform reference-image that accurately represents a sum of said light samples with each of said light samples being represented with a correct relative proportion in said reference image; and

an electronic camera that includes an image sensor for capturing a reference image from said diffused output light through said diffusion filter, said reference image providing a uniform neutral averaged-summation of said input light for calculating color correction values to perform a white balance procedure for accurately representing captured electronic images.

76. (Previously Presented) A system for performing electronic imaging procedures, comprising:

a diffusion filter configured to receive input light and responsively generate diffused output light and wherein said diffusion filter is implemented to pass a same or similar amount of incident light as is reflected by a neutral photographic gray card selected to represent an idealized average subject that is half-way between a white level and a black level, said idealized average subject being assumed to reflect 18 percent of said incident light, to thereby permit a direct adjustment of a camera aperture setting for said electronic camera for a given corresponding photographic subject; and

an electronic camera that includes an image sensor for capturing a reference image from said diffused output light through said diffusion filter, said reference image providing a uniform neutral averaged-summation of said input light for calculating color correction values to perform a white balance procedure for accurately representing captured electronic images.

77. (Previously Presented) A system for performing electronic imaging procedures, comprising:

a diffusion filter configured to receive input light and responsively generate diffused output light and wherein said diffusion filter is provided with a diffusion disc of translucent image-blocking plastic or glass to transmit approximately 18% of said input light impinging thereon, said diffusion filter being supplemented with one or more color correcting filters that are calibrated to adjust said diffusion filter to a balanced white point; and

an electronic camera that includes an image sensor for capturing a reference image from said diffused output light through said diffusion filter, said reference image providing a uniform neutral averaged-summation of said input light for calculating color correction values to perform a white balance procedure for accurately representing captured electronic images.

78. (Previously Presented) A system for performing electronic imaging procedures, comprising:

a diffusion filter configured to receive input light and responsively generate diffused output light and wherein said diffusion filter includes a diffusion plate that initially receives said input light with a substantially-flat first face, said diffusion plate also including a prism array of prism-like projections that are arranged on an opposing second face of said diffusion plate, individual components of said input light each being separately refracted, dispersed, and diffused by prismatic elements of said prism array to create uniformly diffused light that accurately represents an averaged summation of all of said individual components of said input light in correct respective proportions; and

an electronic camera that includes an image sensor for capturing a reference image from said diffused output light through said diffusion filter, said reference image providing a uniform neutral averaged-summation of said input light for calculating color correction values to perform a white balance procedure for accurately representing captured electronic images wherein said electronic camera documents color characteristics of said input light by storing said uniform neutral averaged-summation of said input light as said reference image onto an electronic storage device.

79. (Previously Presented) A system for performing electronic imaging procedures, comprising:

a diffusion filter configured to receive input light and responsively generate diffused output light and wherein said diffusion filter includes a diffusion plate that initially receives said input light with a substantially-flat first face, said diffusion plate also including a prism array of prism-like projections that are arranged on an opposing second face of said diffusion plate, individual components of said input light each being separately refracted, dispersed, and diffused by prismatic elements of said prism array to create uniformly diffused light that accurately represents an averaged summation of all of said individual components of said input light in correct respective proportions and wherein said diffusion filter includes a color compensator with one or more color filtration devices for altering one or more color components of said diffused light to produce corresponding filtered light that has desired color balance characteristics, said color compensator being selectable to allow said diffusion filter to be implemented as a completely color-neutral device that passes said input light without any color alterations, said color compensator alternately being selectable to intentionally add a desired colorcast to said input light that is passed through said diffusion filter; and

an electronic camera that includes an image sensor for capturing a reference image from said diffused output light through said diffusion filter, said reference image providing a uniform neutral averaged-summation of said input light for calculating color correction values to perform a white balance procedure for accurately representing captured electronic images wherein said electronic camera documents color characteristics of said input light by storing said uniform neutral averaged-summation of said input light as said reference image onto an electronic storage device.

80. (Previously Presented) A system for performing electronic imaging procedures, comprising:

a diffusion filter configured to receive input light and responsively generate diffused output light and wherein said diffusion filter includes a diffusion plate that initially receives said input light with a substantially-flat first face, said diffusion plate also including a prism array of prism-like projections that are arranged on an opposing second face of said diffusion plate, individual components of said input light each being separately refracted, dispersed, and diffused by prismatic elements of said prism array to create uniformly diffused light that accurately represents an averaged summation of all of said individual components of said input light in correct respective proportions and wherein said diffusion filter includes a color compensator with one or more color filtration devices for altering one or more color components of said diffused light to produce corresponding filtered light that has desired color balance characteristics, said color compensator being selectable to allow said diffusion filter to be implemented as a completely color-neutral device that passes said input light without any color alterations, said color compensator alternately being selectable to intentionally add a desired colorcast to said input light that is passed through said diffusion filter and wherein said diffusion filter includes a translucent filter to attenuate said filtered light to produce said diffused output light, said translucent filter being selectable to ensure that said diffused output light is approximately 18% of said input light, said translucent filter also operating to further diffuse said filtered light to produce said diffused output light as said uniform neutral averaged-summation of all of said individual components of said input light; and

an electronic camera that includes an image sensor for capturing a reference image from said diffused output light through said diffusion filter, said reference image providing a uniform neutral averaged-summation of said input light for calculating color correction values to perform a white balance procedure for accurately representing captured electronic images wherein said electronic camera documents color characteristics of said input light by storing said uniform neutral averaged-summation of said input light as said reference image onto an electronic storage device.

81. (Previously Presented) A system for performing electronic imaging procedures, comprising:

a diffusion filter configured to receive input light and responsively generate diffused output light; and

an electronic camera that includes an image sensor for capturing a reference image from said diffused output light through said diffusion filter, said reference image providing a uniform neutral averaged-summation of said input light for calculating color correction values to perform a white balance procedure for accurately representing captured electronic images wherein said electronic camera documents color characteristics of said input light by storing said uniform neutral averaged-summation of said input light as said reference image onto an electronic storage device wherein said white balance procedure determines a white balance condition for said captured electronic images by capturing said reference image through said diffusion filter to document on a full frame, neutral-gray-density image a combined averaged colorcast created by an imbalance of red-green-blue components present in all light components of said input light captured within 180 degrees of a front plane of said image sensor, said combined averaged colorcast representing respective proportions of red, green, and blue channels of said image sensor according to existing light conditions when said reference image is captured.

82. (Previously Presented) A method for performing electronic imaging procedures, comprising the steps of:

utilizing a diffusion filter to receive input light and responsively generate diffused output light; and

capturing a reference image from said diffused output light through said diffusion filter by utilizing an image sensor of an electronic camera, said reference image providing a uniform neutral averaged-summation of said input light for calculating color correction values to perform a white balance procedure for accurately representing captured electronic images wherein said reference image provides an 18% neutral-density full-frame reference image of a uniform consistency for achieving optimum 18% exposure levels and digital white balance for said captured electronic images.

83. (Previously Presented) A method for performing electronic imaging procedures, comprising the steps of:

utilizing a diffusion filter to receive input light and responsively generate diffused output light wherein said diffusion filter is utilized to create said reference image with said input light formed from light samples that are collected, diffused and averaged to create a single uniform reference-image that accurately represents a sum of said light samples with each of said light samples being represented with a correct relative proportion in said reference image; and

capturing a reference image from said diffused output light through said diffusion filter by utilizing an image sensor of an electronic camera, said reference image providing a uniform neutral averaged-summation of said input light for calculating color correction values to perform a white balance procedure for accurately representing captured electronic images.

84. (Previously Presented) A method for performing electronic imaging procedures, comprising the steps of:

utilizing a diffusion filter to receive input light and responsively generate diffused output light wherein said diffusion filter is implemented to pass a same or similar amount of incident light as is reflected by a neutral photographic gray card selected to represent an idealized average subject that is half-way between a white level and a black level, said idealized average subject being assumed to reflect 18 percent of said incident light, to thereby permit a direct adjustment of a camera aperture setting for said electronic camera for a given corresponding photographic subject; and

capturing a reference image from said diffused output light through said diffusion filter by utilizing an image sensor of an electronic camera, said reference image providing a uniform neutral averaged-summation of said input light for calculating color correction values to perform a white balance procedure for accurately representing captured electronic images.

85. (Previously Presented) A method for performing electronic imaging procedures, comprising the steps of:

utilizing a diffusion filter to receive input light and responsively generate diffused output light wherein said diffusion filter is provided with a diffusion disc of translucent image-blocking plastic or glass to transmit approximately 18% of said input light impinging thereon, said diffusion filter being supplemented with one or more color correcting filters that are calibrated to adjust said diffusion filter to a balanced white point; and

capturing a reference image from said diffused output light through said diffusion filter by utilizing an image sensor of an electronic camera, said reference image providing a uniform neutral averaged-summation of said input light for calculating color correction values to perform a white balance procedure for accurately representing captured electronic images.

86. (Previously Presented) A method for performing electronic imaging procedures, comprising the steps of:

utilizing a diffusion filter to receive input light and responsively generate diffused output light wherein said diffusion filter includes a diffusion plate that initially receives said input light with a substantially-flat first face, said diffusion plate also including a prism array of prism-like projections that are arranged on an opposing second face of said diffusion plate, individual components of said input light each being separately refracted, dispersed, and diffused by prismatic elements of said prism array to create uniformly diffused light that accurately represents an averaged summation of all of said individual components of said input light in correct respective proportions; and

capturing a reference image from said diffused output light through said diffusion filter by utilizing an image sensor of an electronic camera, said reference image providing a uniform neutral averaged-summation of said input light for calculating color correction values to perform a white balance procedure for accurately representing captured electronic images.

87. (Cancelled)

88. (Previously Presented) A method for performing electronic imaging procedures, comprising the steps of:

utilizing a diffusion filter to receive input light and responsively generate diffused output light wherein said diffusion filter includes a translucent filter to attenuate said filtered light to produce said diffused output light, said translucent filter being selectable to ensure that said diffused output light is approximately 18% of said input light, said translucent filter also operating to further diffuse said filtered light to produce said diffused output light as said uniform neutral averaged-summation of all of said individual components of said input light; and

capturing a reference image from said diffused output light through said diffusion filter by utilizing an image sensor of an electronic camera, said reference image providing a uniform neutral averaged-summation of said input light for calculating color correction values to perform a white balance procedure for accurately representing captured electronic images.

89. (Previously Presented) A method for performing electronic imaging procedures, comprising the steps of:

utilizing a diffusion filter to receive input light and responsively generate diffused output light; and

capturing a reference image from said diffused output light through said diffusion filter by utilizing an image sensor of an electronic camera, said reference image providing a uniform neutral averaged-summation of said input light for calculating color correction values to perform a white balance procedure for accurately representing captured electronic images wherein said white balance procedure determines a white balance condition for said captured electronic images by capturing said reference image through said diffusion filter to document on a full frame, neutral-gray-density image a combined averaged colorcast created by an imbalance of red-green-blue components present in all light components of said input light captured within 180 degrees of a front plane of said image sensor, said combined averaged colorcast representing respective proportions of red, green, and blue channels of said image sensor according to existing light conditions when said reference image is captured.